CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH · ESTABLISHED APRIL 15, 1870

California's Health

Vol. 14, No. 12 · Published twice monthly · December 15, 1956

TEN YEARS OF HOSPITAL EXPANSION IN CALIFORNIA

California's population has increased in excess of 4,000,000, or nearly 50 percent in the 10 years, 1946 to 1956. A high birth rate and migration from other states is expected to support a continuing increase of 400,000 a year from the next 10 years. This phenomenal growth in population has created and will continue to create serious problems in providing adequate hospital facilities in many areas of the State.

The largest population increases since 1946 have occurred in suburban areas where communities have developed of sufficient sizes and resources to need their own hospital facilities. For example, San Francisco's population increased only 2.8 percent between 1950 and 1956, while Marin, San Mateo and Santa Clara Counties increased 40, 50 and 60 percent respectively. Many of the individual communities in these counties increased 50 to 75 percent and some of them doubled or tripled in population. Los Angeles City grew 14 percent between 1950 and 1956, while the remainder of the county increased nearly 40 percent and certain communities tripled. Neighboring Orange County nearly doubled in population.

The growth of population in suburban and rural areas has influenced greatly the present geographical distribution of hospitals. In 1946 nearly 40 percent of the general hospital beds of the State were within the city limits of Los Angeles and San Francisco. Today only 33 percent of the general hospital beds are within these two cities, although there has been a net addition of approximately 3,200 beds in these cities since 1946. Expansion during the past 10 years has involved not only an increase in the total number of hospital beds in the State, but also a decentralization of facilities from the urban centers.

In the past decade California has constructed hospitals at a phenomenal rate in an attempt to overcome the shortage in facilities which existed at the close of World War II and to meet the needs of the 4,000,000 additional people who have come to California during this period. In its report just published, "Hospitals for California, 1956," the State Department of Public Health reviews 10 years of hospital expansion in California and defines the 1956-57 state plan for hospital construction.

In the report the total development of hospitals in California is related to the department's activity in administering the Hospital Survey and Construction Program. The report also points out trends which appear to be of major significance in planning for the economical and realistic expansion of hospitals during the next few years.

The section which recounts the 10-year review of hospital expansion in California is given here for those readers of *California's Health* whose interest is more casual.

Copies of the complete report have been sent to local health officers, to most of the hospital administrators, and to others interested in the hospital construction program.

Another problem in planning for hospital facilities is the increasing number of elderly people, whose needs for hospitalization are greater than in the younger age groups. The State's population age 65 and over is currently estimated at 1,160,000 and is increasing by more than 40,000 a year. According to the recent California Health Survey, people over 65 use twice as many general hospital days per capita as do the younger age groups. The best available estimates indicate that approximately 10 days of care a year in medical institutions must be provided for every person age 65 or over, of which one-third will be in mental institutions and nearly one-half in facilities for chronic diseases. To meet this problem, communities must plan facilities for long-term care such as chronic disease hospitals and nursing homes in order to relieve the demand on acute beds of general hospitals for the care of aged persons with long-term illnesses.

In planning medical facilities for California's aging population, the uneven distribution of the aged within the State must be considered. In 1950, Lake and Santa Cruz Counties reported one person in every seven was 65 or over, while in Contra Costa, Kern and Imperial Counties the ratio was less than one in 20. Estimates since 1950 indicate that the proportion of older persons is increasing in most mountain and isolated counties. In the new suburban developments, the population characteristically is composed of younger families with children.

Planning hospital facilities for current and future needs require recognition of the different characteristics of population groups in the various areas of the State. This affects not only the number of general hospital beds needed, but also the type and nature of medical facilities required by the local communities.

Hospital Growth

The total acceptable beds in general hospitals in California increased from 26,052 to 40,702 between 1946 and 1956, a gain of 56 percent. This building program has reduced somewhat, but has not eliminated the shortage of general hospital facilities which has continued since 1946 because of the increase in population of the State. Hospital beds of other types have been built at a lower rate. Mental hospitals increased 30 percent, tuberculosis hospitals increased 45 percent and chronic hospitals 50 percent. Currently general hospitals meet approximately 80 percent of estimated bed need of the State in comparison with 60 percent for mental institutions and 15 percent for chronic disease units. Table 1 summarizes hospital construction since 1946 in California. Table 2 shows a comparison between 1946 and 1956 on the adequacy of general hospitals for the 14 regions in California.

TABLE 1

HOSPITAL CONSTRUCTION IN CALIFORNIA FOR THE PAST 10 YEARS (1947-1956)

Number of Beds by Category

Year	Total	General	Tuberculosis	Mental	Chronic
Total	31,865	17,038	2,186	11,341	1,300
1947	255	255	-------	-------	-------
1948	807	199	608	-------	-------
1949	796	571	88	-------	137
1950	4,356	1,033	620	2,494	209
1951	4,615	1,336	62	3,129	88
1952	3,106	1,386	180	1,474	66
1953	2,629	2,007	-------	532	90
1954	3,875	2,349	-------	1,152	374
1955	3,077	2,586	293	114	84
1956*	8,349	5,316	335	2,446	252

* Includes beds completed under construction or in advanced planning stage.

Of equal importance with the total increase in general acute beds has been the substantial expansion of hospitals in many areas which 10 years ago had no facilities or only unsuitable facilities. For purposes of studying hospital needs throughout California, the State is divided into hospital service areas, of which there now are 111. For planning purposes, each of these is considered to be a hospital community. In 1946, 14 hospital service areas of the State had no acceptable general hospital beds; in 1956, only one of these areas had no acceptable hospital beds. Ten years ago, nearly half of the hospital areas had less than 50 percent of their estimated bed needs; in 1956, less than one-seventh of the areas had less than 50 percent of need met. The improvement is especially noticeable in the smallest areas of less than 25,000 population. In 1946, one-third of these areas had less than 25 percent of the beds that were estimated to be needed. In 1956, only one area of less than 25,000 population had less than 25 percent of the beds estimated to be needed.

TABLE 2

COMPARISON OF ADEQUACY OF GENERAL HOSPITAL FACILITIES BY REGION CALIFORNIA 1946-1956 [1]

Region number	Regional center	Population		Existing acceptable beds				Percent of need met	
				1946		1956			
		1946[2]	1955[3]	Total	County[4]	Total	County[4]	1946	1956
I	Redding	77,900	91,600	178	139	345	199	54	88
II	Eureka	72,700	119,700	201	97	445	149	56	73
III	Chico	117,200	131,500	241	108	476	163	58	87
IV	Santa Rosa	153,000	219,200	407	159	704	153	72	83
V	Sacramento	407,400	578,300	1,096	492	1,707	838	59	77
VI	San Francisco	2,185,500	2,917,700	7,619	1,714	10,620	1,671	70	82
VII	Stockton	323,100	416,300	682	363	1,428	648	49	99
VIII	Salinas	195,900	251,500	563	203	758	237	84	86
IX	Fresno	514,000	629,200	1,159	600	1,936	743	53	86
X	Santa Barbara	230,200	316,100	812	264	1,112	338	81	86
XI	Bakersfield	173,400	228,100	602	370	623	248	69	84
XII	Los Angeles	3,909,000	5,552,200	10,452	3,151	17,025	4,235	55	75
XIII	San Bernardino	329,200	488,900	856	366	1,370	249	53	75
XIV	San Diego	518,300	755,700	1,184	482	2,153	552	55	76
California total		9,206,800	12,696,000	26,052	8,508	40,702	10,423		

[1] A detailed breakdown by hospital service area is available in Bureau of Hospitals.
[2] 1946 population estimates are arithmetic interpolations between 1940 and 1950 census years and include military population.
[3] 1955 population estimates are by the California State Department of Finance. Military population is not included.
[4] County beds are included in total existing beds.

The wider distribution of general hospitals appears to have reduced overcrowding of existing facilities. Of 341 hospitals reporting average occupancy rates in 1946, more than one-third had a rate higher than 80 percent, and 28 hospitals reported more than 100 percent average occupancy. In comparable reports for 408 hospitals in 1955, less than one-fifth of the hospitals reported over 80 percent occupancy and only eight reported over 100 percent average occupancy. While opinions differ on the occupancy rate which is ideal for effective and efficient patient care, it is generally accepted that 70-80 percent average occupancy during the entire year, depending on the hospital's size, is the maximum which is desirable.

State and Federal Assistance

Approximately one-fourth of the general hospital expansion and less than one-fifth of the total hospital expansion in California since 1946 have received financial assistance from state and federal funds. More than 30,000 beds, including those in state institutions, have been constructed since 1946. Constructing and equipping these facilities has cost between $400,000,000 and $500,000,000. Of the 21,151 total beds constructed, exclusive of nursing homes and state mental institutions, 6,905 beds have been constructed with assistance from the hospital construction program. A total of $58,635,569 of state and federal funds has been allocated to local governmental agencies and nonprofit community corporations to help finance additional hospital and medical facilities in California. Approximately 100 applications remain on file

with the department for consideration each year. Many potential applications are not filed because the sponsors realize that funds are not available to assist projects in the lower priority positions.

Major emphasis during the past 10 years has been on construction of additional general hospital facilities. More than one-half of the 130 projects receiving assistance have been general hospitals. These 74 projects provide 5,260 beds or nearly three-quarters of the beds constructed with assistance from the program. The general hospital projects received $44,194,980, or more than three-quarters of the funds, allocated to projects during the past 10 years. Seventy-three projects with 4,165 beds have been completed and placed in operation; 25 projects with 1,072 beds are under construction and 32 projects with 1,867 beds are in planning stages. Experience in the program indicates that two to four years is required to plan, construct and equip a project following an allocation of assistance.

During the early years of the program assistance was provided primarily for development of relatively small facilities in isolated, rural areas which had no hospital facilities or which had inadequate hospitals. Thirty-five of the 73 general hospital projects are less than 50 beds. Thirty-one of the general hospital projects providing 1,468 beds are located in hospital service areas with less than 50,000 population. During more recent years, the program has provided increasing assistance for development of larger hospitals located in suburban areas which have experienced extremely rapid population growth. Eighteen projects have 100 or more beds each, and 23 projects with 2,762 beds are located in service areas with more than 150,000 population.

The expansion of hospital facilities in California has been financed by nonprofit corporations and proprietary investments in addition to state, county and hospital district developments. The State has provided over one-third of the total additional beds —10,714 in state mental institutions and 820 in state university medical centers. Nearly one-half of the general hospital expansion and approximately 28 percent of the total expansion in hospital beds have been sponsored by community nonprofit organizations.

Counties and hospital districts each have provided approximately 15 percent of the general hospital expansion and the counties have assumed nearly all of the expansion for tuberculosis facilities. Review of assistance provided under the Hospital Construction Program shows that nonprofit corporations sponsored 52 projects with 3,447 beds and received $23,699,943 in assistance from state and federal funds. Hospital districts and cities sponsored 32 projects with 1,669 beds and received $17,057,038 in assistance, while county governments received $13,635,936 for 25 projects to provide 1,998 additional beds. In addition, county and city governments received $4,242,652 for assistance in construction of 21 new public health center facilities.

The hospital construction program was amended in 1954 to provide assistance designated specifically for nursing homes, diagnostic and treatment centers, rehabilitation facilities and chronic disease hospitals in addition to the assistance made available for distribution to public health centers, and general tuberculosis, mental and chronic disease hospitals. The experience during two years of planning for nursing homes, diagnostic and treatments centers and rehabilitation facilities indicates need for additional study to obtain accurate information on existing facilities and to establish improved policies for future planning.

Future Needs

The need for additional hospitals and related facilities in California is expected to continue for many years because of the steadily increasing population of the State. Of the 111 hospital areas of the State, 44 areas (40 percent) still have less than three-fourths of the general hospital beds which it is estimated they need, and 15 areas have less than one-half of their estimated need. In addition, an estimated 1,500 or more beds must be added each year to serve the anticipated annual population growth.

In recent years, there has been an appreciable decrease in the average length of stay in general hospitals, which means that existing beds can serve a larger population; however, further reductions in length of stay seems improbable. Of major importance in the future will be the provision of chronic hospital and nursing home beds for the increasing number of elderly people, the location of these facilities in relationship to the distribution of the elderly population within the State, and the problems in financing hospitalization for this group. Since the phenomenal growth of suburban areas appears likely to continue, the provision of additional

TABLE 3

EXISTING AND ADDITIONAL BEDS NEEDED
1956-1960-1965

Category	1956		1960		1965	
	Existing acceptable beds	Additional beds needed	Total bed need	Additional beds needed	Total bed need	Additional beds needed
General hospitals	40,702	†10,715	58,860	18,158	66,920	26,218
Chronic disease hospitals	3,672	†11,563	17,658	13,986	20,076	16,404
Tuberculosis hospitals	6,179	3,685	6,179	*	6,179	*
Mental hospitals	42,062	21,418	73,575	31,513	83,650	41,588
Nursing homes	14,360	†9,657	26,487	12,127	30,114	15,754
Total	106,975	57,038	182,759	75,784	206,939	99,964

* The need for additional tuberculosis beds has not been estimated. The continual lowering of occupancy in many tuberculosis facilities suggests that there will be no substantial need for additional beds except in some urban areas and for replacement. For the years 1960 and 1965 bed need estimated on same basis as for the year 1956.

† Estimated beds needed. General hospitals determined by three beds per 1,000 population for individual service areas plus beds needed for normal utilization demonstrated by existing facilities plus three beds per 1,000 population increase during the previous three years. For chronic disease and nursing home beds—three beds per 1,000 population planned as a conservative joint estimate of state need. Of this total 1.2 beds planned for chronic disease and 1.8 beds planned for nursing home category.

hospital facilities to meet the needs in newly developed areas will continue to be a major factor in hospital planning and construction. Table 3 gives estimates of the facilities which will be needed by 1960 and 1965.

Need for expansion of hospital facilities of various types makes it highly important that all those interested in hospital development coordinate their activities so that the people of California may obtain an orderly expansion of needed facilities within conservative objectives. Establishing these objectives for state-wide planning is a complicated and challenging task. To aid in providing for the future hospital and health facility needs of California, the department attempts to the best of its ability to be of service in coordinating state-wide planning. The department seeks to provide assistance to all agencies concerned with hospital development whether or not such expansion receives financial assistance from the Hospital Survey and Construction Program. This service includes coordinated planning for general, tuberculosis, mental and chronic disease hospitals, health centers, nursing homes, diagnostic and treatment centers and rehabilitation facilities. Included in the department's activity relating to this planning are:

1. Annual inventory of existing facilities.
2. Classification of institutions by category, and classification of physical facilities as suitable or substandard.
3. Delineation of hospital service areas to provide a logical basis for local planning throughout the State.
4. Estimation of needs within each service area.
5. Determination of relative area need throughout the State based on comparison of inventory of suitable facilities with estimated needs.

HOSPITAL REGIONS—CALIFORNIA—1956

The planning and construction of a new hospital or expansion of an existing hospital is a difficult task. To be successful, this planning must be conceived and developed to meet demonstrated community need. Building a new hospital or expanding an existing institution is one of the most complicated and expensive of community projects. The State Department of Public Health assists communities in developing community surveys, building programs, cost estimates and other elements significant in hospital planning. The department also makes available, upon request, technical publications relating to planning and cost of hospitals. The experience of the staff of the department in working with many communities throughout the State in developing programs for new and additional hospital facilities, has emphasized that careful hospital planning is of utmost importance. No two communities have identical hospital problems. Community customs, attitudes, availability of physicians, adjacency to other cities and many other sociological and economic factors are of extreme importance in community planning for hospital services.

A record number of 66,273 handicapped persons were restored to productive employment (in the United States) through the state-federal vocational rehabilitation program for the fiscal year ending June 30, 1956. —*Public Health Reports, Vol. 71, No. 11, November, 1956.*

DEPARTMENT OF PUBLIC HEALTH SUMMARIZES OCCUPATIONAL DISEASE REPORTS

The California State Department of Public Health reviewed and analyzed 24,736 occupational disease reports (*Doctors First Report of Work Injury*) during 1955, an increase of 7 percent over the previous year's 23,101 reports. Industries which showed the greatest occupational disease report rates per 1,000 workers were agriculture 11.8, construction 10.4, manufacturing 8.8.*

The largest single disease category (43 percent) was recorded as diseases of the skin, most of which were dermatitis attributed to both chemicals and poison oak. The next largest (17 percent) was that attributed to venom and bites, mostly bee stings and dog bites, and third (14 percent), diseases of bones and organs of movement, primarily bursitis and tenosynovitis.

As shown in Table 1, of 426 reports of infectious diseases of the intestinal tract, 91 percent concerned persons working in agriculture. Almost without exception food poisoning was the diagnosis reported. About 10 farm and farm labor organizations were implicated in these outbreaks, pointing to the need for further education in food preparation among these groups.

Of the 118 reports of diseases of bacterial, spirochetal, virus and rickettsial origin, 72 percent concerned persons working in government, primarily state hospitals. The diagnosis given on most of these reports was infectious hepatitis, thus emphasizing the risk of infectious disease among employees in state institutions.

Reports of diseases of the skin represented the greatest number attributed to one category, 10,638. Seventy-two percent of the 3,508 poison oak reports appeared to be evenly distributed among workers in agriculture (23 percent), construction (23 percent), government (26 percent). The rest of the reports of poison oak dermatitis were spread among the other industrial categories. Over half of the 4,620 reports of dermatitis attributed to drugs and other chemicals concerned workers in the manufacturing industries.

* Estimate is from California Department of Industrial Relations, Division of Labor Statistics and Research.

The classical occupational illnesses, while low in number, were still causing concern: brucellosis 10, poisoning by mercury and its compounds 4, poisoning by lead and its compounds 58, metal fume fever 22. There were no reports attributed to anthrax or beryllium poisoning, nor were there any reports of illness attributed to ionizing radiation which is of more recent concern to industry.

Of the 24,736 reports, as shown in Table 2, 82 percent concerned men and 18 percent women. Yet nearly one-third of all the workers covered by the California Workmen's Compensation Act in 1955 were women.*

Median ages were computed for the total and for both sexes exclusive of those reports on which age was not stated. The median age for the entire group was 35.1. Women appeared to be on the average somewhat older than men, 37.2 years as compared with 34.6 years.

Occupational disease reports were received from all counties except Alpine. The greatest number of reports were received from Los Angeles, about 40 percent of the total. The next largest group came from the Bay Area (Alameda, Contra Costa, Marin, San Francisco, San Mateo) about 15 percent of the total.

Fatalities reported from all sources totaled 226 in 1955. As seen in Table 3, deaths attributed to cardiovascular disease numbered 149, silicotuberculosis 34. There were five poisonings, one each from benzene, carbon tetrachloride, chlorate defoliant, lead and trichlorethylene.

The basis of the data discussed above is the *Doctor's First Report of Work Injury*. Section 6407 of the California Labor Code states that each physician in this State who attends an injured employee, and each employer of the injured worker are required to file a report of that injury with the California Department of Industrial Relations when disability lasts beyond the day or injury or requires medical service other than ordinary first aid treatment. Any disease, as well as any injury, which occurs during the course of and arises out of employment is defined by law as an industrial injury.

Based upon the employers' reports, the Division of Labor Statistics and Research of the California State Department of Industrial Relations prepares statistical analyses of all disabling work injuries. The Bureau of Adult Health of the California State Department of Public Health, in accordance with an interagency agreement, reviews and analyzes those doctors' reports which concern occupational disease.

The statistical analysis is subject to several limitations, one of which is incomplete reporting. Several disease categories, e.g. tuberculosis, tetanus, are known to be underreported. Secondly, only 80 percent * of the employed population is covered by the California Workmen's Compensation Act; and therefore the occupational diseases of 20 percent of the employed population are not reported. Not covered are self-employed, workers employed by farmers who elect not to be covered, federal employees, maritime workers and most railroad workers in interstate commerce.

A third limitation of the report is that it covers only the findings made at the first examination. This does not in all cases reflect the final diagnosis. And lastly, the amount of lost time given on the report is estimated by the physician at the first examination. This may result in some error concerning the actual duration of disability. Despite such limitations, the reports serve as a guide in evaluating the size and kind of occupational health problems existing in California.

Executive Committee Appointment for Dr. Merrill—State and Territorial

Malcolm H. Merrill, M.D., California State Director of Public Health, has been appointed to a three-year term on the executive committee of the State and Territorial Health Officers Association. The association held its annual meeting in Atlantic City, November 5th to 9th. Franklin D. Yoder, M.D., Wyoming State Director of Public Health, is president of the association for the coming year.

TABLE 1

OCCUPATIONAL DISEASE REPORTS [1] BY DISEASE GROUP AND MAJOR INDUSTRY GROUP
CALIFORNIA, 1955

DISEASE GROUP	TOTAL	INDUSTRY GROUP									
		Agriculture	Mining and quarrying	Construction	Manufacturing	Transportation, communication and utilities	Trade	Finance, insurance and real estate	Service	Government	Establishment not stated
Total, all diseases	24,736	3,752	139	2,801	9,899	1,291	1,652	174	2,304	2,490	234
Infective and parasitic diseases, total	657	412	--	12	49	4	19	1	34	126	--
Tuberculosis	13	--	--	1	1	--	1	--	2	8	--
Infectious diseases of the intestinal tract[2]	426	389	--	5	3	3	2	--	5	19	--
Brucellosis	10	3	--	--	7	--	--	--	--	--	--
Diseases of bacterial, spirochetal, virus and rickettsial origin[3]	118	7	--	2	5	1	2	--	16	85	--
Other infective and parasitic diseases	90	13	--	4	33	--	14	1	11	14	--
Diseases of central nervous system and peripheral nerves	148	14	1	16	65	4	15	4	14	15	--
Diseases of the eye, total	2,423	113	32	381	1,463	97	73	--	146	67	51
Conjunctivitis and ophthalmia due to welding flash	2,325	103	30	377	1,422	96	55	--	128	64	50
Other conjunctivitis and ophthalmia	95	10	2	4	39	1	18	--	17	3	1
Non-inflammatory diseases and conditions of the eye	3	--	--	--	2	--	--	--	1	--	--
Diseases of the ear	157	2	--	22	34	78	4	1	9	7	--
Diseases of the respiratory system	842	81	6	80	415	30	39	3	70	107	11
Diseases of the skin, total	10,368	1,671	42	1,311	4,167	352	774	65	975	1,182	99
Dermatitis due to oils and greases	577	13	4	39	430	8	36	--	29	10	8
Dermatitis due to solvents	393	4	3	19	260	12	43	2	37	10	3
Dermatitis due to drugs and other chemicals	4,620	364	15	348	2,519	95	485	34	508	200	52
Dermatitis due to poison oak	3,508	807	17	820	352	216	46	18	302	902	28
Dermatitis due to other plants	616	350	--	19	168	6	28	1	18	26	--
Infections of skin, subcutaneous tissues and lymph glands	707	114	2	50	319	9	110	8	65	24	6
Other diseases of skin	217	19	1	16	119	6	26	2	16	10	2
Diseases of bones and organs of movement	3,429	312	7	431	1,802	76	331	47	276	120	27
Systemic effects of poisons, total	804	198	26	48	321	14	13	2	79	99	4
Poisoning by industrial solvents	165	--	--	3	132	2	1	1	13	13	--
Poisoning by mercury and its compounds	4	--	2	--	2	--	--	--	--	--	--
Poisoning by lead and its compounds	58	--	5	5	42	--	1	--	4	1	--
Poisoning by carbon monoxide	48	5	--	14	15	4	1	--	5	4	--
Poisoning by other gases and vapors	204	7	19	17	74	3	3	1	13	64	3
Poisoning by arsenic and its compounds	5	1	--	2	--	--	--	--	1	1	--
Metal fume fever and poisoning by other metals	22	--	--	5	15	1	1	--	--	--	--
Poisoning by pharmaceuticals	2	1	--	--	1	--	--	--	--	--	--
Poisoning by pesticides and other agricultural chemicals	181	103	--	1	17	4	5	--	39	11	1
Poisoning by other and unspecified substance	115	81	--	1	23	--	1	--	4	5	--
Illness due to venom and bites[4]	4,179	708	13	295	991	586	310	42	573	627	34
Effects of weather, exposure and related conditions	503	130	2	102	146	23	17	3	46	31	3
Burns[5]	379	22	2	56	214	11	23	2	30	17	2
Other and unspecified diseases	577	89	8	47	232	16	34	4	52	92	3

[1] Reports of diseases attributable to occupational exposure. Excludes diseases of employees not covered by the California Workmen's Compensation Act, such as self-employed, federal employees, maritime workers, railroad workers in interstate commerce and workers employed by farmers who elect not to be covered.
[2] This includes food poisoning for the most part.
[3] This includes infectious hepatitis for the most part.
[4] These are mainly effects of stings and insects and animal bites.
[5] These consist only of burns arising from repeated exposures. Burns from heat, fires or explosions are reported in the accident statistics of the Department of Industrial Relations.
NOTE: Fatalities are excluded from this table.
SOURCE: State of California, Department of Industrial Relations, "Doctor's First Report of Work Injury." Statistics compiled by State of California, Department of Public Health.

TABLE 2

OCCUPATIONAL DISEASE REPORTS[1] BY AGE AND SEX, CALIFORNIA, 1955

AGE	SEX		
	Total	Men	Women
Total, All Ages	24,736	20,365	4,371
Under 14	73	66	7
14-15	76	61	15
16-17	307	262	45
18-19	872	696	176
20-24	2,938	2,496	442
25-29	3,448	2,958	490
30-34	3,636	3,058	578
35-39	3,138	2,453	685
40-44	2,664	2,091	573
45-49	2,086	1,630	456
50-54	1,595	1,276	319
55-59	1,024	833	191
60-64	642	540	102
65-69	239	214	25
70-74	60	57	3
75 and over	15	14	1
Not stated	1,923	1,660	263
Median Age	35.1	34.6	37.2

[1] Reports of diseases attributable to occupational exposure. Excludes diseases of employees not covered by the California Workmen's Compensation Act, such as self-employed, federal employees, maritime workers, railroad workers in interstate commerce and workers employed by farmers who elect not to be covered.

NOTE: Fatalities are excluded from this table.

SOURCE: State of California, Department of Industrial Relations, "Doctor's First Report of Work Injury." Statistics compiled by California Department of Public Health.

TABLE 3

FATALITIES ATTRIBUTED TO OCCUPATIONAL DISEASES,[1] CALIFORNIA, 1955

DISEASE	Number of fatalities
Total	226
Allergic reaction	2
Asphyxiation	3
Cardio-vascular disease	149
Cerebral-vascular disease	5
Heat prostration	6
Infectious disease	8
Tetanus	2
Coccidioidomycosis	2
Encephalitis	1
Infectious hepatitis	1
Pneumonia	1
San Joaquin Valley Fever	1
Neoplasm	1
Pneumoconiosis	43
Silicosis	5
Silico tuberculosis[2]	34
Pneumoconiosis, other and unspecified	4
Poisonings, Total	5
Benzine	1
Carbon tetrachloride	1
Chlorate defoliant	1
Lead	1
Trichlor ethylene	1
Pulmonary embolism	2
Tuberculosis	2

[1] With the exception of silico tuberculosis, this table represents deaths reported by the Division of Labor Statistics and Research and decisions made by the Industrial Accident Commission, both in the Department of Industrial Relations. Information from the Industrial Accident Commission relates to the year the decision was made and not necessarily to the year of death.

[2] Data on deaths from silico tuberculosis are obtained from the California Department of Public Health records and are deaths occurring in 1955.

SOURCE: State of California, Department of Industrial Relations, Report of Fatalities. State of California, Department of Public Health, Death Records. Statistics compiled by California Department of Public Health.

Live Birth and Fetal Death Certificates Revised

Revised certificates of live birth and fetal death will be used in California beginning January 1, 1957. A revised certificate of death will be used in 1958. The certificates are being revised at this time so that the new forms will be established by the 1960 census period.

The certificates were revised to reflect changes recommended by the National Office of Vital Statistics and items of special interest to California. Some currently reported items have been reworded to obtain more accurate and useful information. In considering proposed revisions to the certificates, the Bureau of Records and Statistics received assistance from the California Conference of Local Health Officers and program directors in the State Department of Public Health.

The following are the major changes in information required on the 1957 certificates of live birth and fetal death:

The items pertaining to the serological test for syphilis are omitted. Since the serological test is now so widely performed, the only program value of these items has been to provide an index of the month during which prenatal care was begun. It is believed, however, that a degree of error is introduced by using the time of this test to indicate the first visit during pregnancy for medical care. Therefore, to obtain more accurate data the question will be asked directly, "During what month of pregnancy was prenatal care begun?"

"First day of last normal menses" is subsituted for "length of pregnancy" on the revised certificate of birth and fetal death and the item "length at birth (crown-heel)" is added. A trial of these two items was conducted in San Diego County during 1955 as reported in the March, 15, 1956, issue of *California's Health*. The results of this study indicate that these items were well reported. It is expected that the inclusion of the item on last normal menses will provide a more accurate length of gestation for the majority of births and fetal deaths. It is anticipated that from these new items an improved definition of prematurity (now based solely on birth weight) may be developed.

On the present certificates rural-urban residence characteristics can be determined only in terms of "outside corporate limits" and "inside corporate limits." On the revised forms, check boxes are provided to obtain information on farm residence. The new certificate asks for "present or last" occupation of father rather than "usual." These new methods of reporting residence and occupation to conform with census definitions will make possible the computation of rates for important population groups.

The new certificates have been sent to local health departments. The local departments will distribute forms to physicians in their jurisdiction.

New Officers—California Conference of Local Health Officers

Ellis D. Sox, M.D., San Francisco County and City Health Officer, was elected president of the California Conference of Local Health Officers at its fall meeting, November 27th-28th in Sacramento. Dr. Sox was vice president of the conference last year. Dr. Merle Cosand, M.D., Orange County Health Officer, was elected vice president, and Dr. Henrik L. Blum, M.D., Contra Costa County Health Officer, secretary.

Chairmen for the Committee of Administrative Practices and the conference's study committees will be named later.

More than a quarter of a million persons are admitted to mental hospitals in the U. S. annually—*Better Health, November, December, 1956.*

Dr. Halverson Retires From UCLA Post; Dr. Goerke Is Named His Successor

Wilton L. Halverson, M.D., for 11 years State Director of Public Health and since 1954 Professor of Preventive Medicine and Public Health at the University of California, Los Angeles, has retired from his university post for health reasons. Dr. Halverson held a dual appointment at U. C. L. A., as chairman of the Department of Preventive Medicine and Public Health of the U. C. L. A. School of Medicine and also as Associate Dean of the University of California's School of Public Health. Dr. Halverson's great contributions to the University were recognized by special action of the regents at their October meeting in according him emeritus status.

Dr. L. S. Goerke, Professor of Preventive Medicine and Public Health at the U. C. L. A. Medical School since 1954, has been appointed by the University to succeed Dr. Halverson. Dr. Goerke joined the U. C. L. A. faculty after eight years with the Los Angeles City Health Department, where he served as director of the department's district services. Dr. Goerke has had wide experience in the field of public health. Before he joined the Los Angeles City Health Department in 1946 he had served as health officer of Clatsop County, Oregon, and Yolo County, California. In June, 1956, he was appointed by Governor Knight to serve on the State Board of Public Health for a four-year term ending January 15, 1960.

Study Reveals S. F. Bay Area Air Pollution Problems

Air pollution, as measured by the amount of oxidants in the atmosphere, is a year-around problem in the San Francisco Bay area, according to the findings of an ongoing study by the Bureau of Air Sanitation, State Department of Public Health.

The study, begun in September, 1954, was established to measure atmospheric oxidants to determine the geographical distribution of oxidants in the San Francisco Bay area, the seasonal variation and the Bay area oxidant level compared with that of the Los Angeles area.

A network of atmospheric sampling stations was set up in 1954 in Alameda, Contra Costa, Santa Clara, San Mateo and San Francisco Counties. Sampling in these counties is done by personnel in county health departments and other governmental agencies. Results after two years of sampling show that, geographically, the amount of oxidants in the atmosphere are consistently higher in certain areas but, during high oxidant episodes, the oxidant distribution is variable and high levels may be found in almost any area. Seasonally, oxidant values are lowest in the months of December and January, but no seasonal trend is apparent.

Results of the Bay area study as compared to results obtained in Pasadena show that the Pasadena average is four times that of the highest ranking Bay area station. The highest single value recorded in the Bay area is about one-half the Pasadena maximum. This suggests that the oxidant level rises above a low background level on fewer days in the Bay area, but when oxidant-producing conditions do occur, the oxidant can rise to a relatively high value.

The highest standards of health and hygiene will be attained only by the cooperation of the people themselves and this can be obtained only by health education.—*Maryland State Department of Public Health Monthly Bulletin, Vol. 28, No. 10, October, 1956.*

Entered as second-class matter Jan. 25, 1949, at the Post Office at Berkeley, California, under the Act of Aug. 24, 1912. Acceptance for mailing at the special rate approved for in Section 1103, Act of Oct. 3, 1917.

STATE DEPARTMENT OF PUBLIC HEALTH
BUREAU OF HEALTH EDUCATION
2151 BERKELEY WAY
BERKELEY 4, CALIFORNIA

printed in CALIFORNIA STATE PRINTING OFFICE

42810-H 12-56 10,800